

**TWO NEW SPECIES OF MENACANTHUS (MALLOPHAGA:
MENOPONIDAE) FROM WOOD-SWALLOWS (PASSERIFORMES:
ARTAMIDAE)¹**

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ABSTRACT—Two new species of *Menacanthus* are described and illustrated: *M. nelsoni* off *Artamus cyanopterus* from Tasmania and New South Wales and *M. elbeli* off *A. fuscus* from Thailand. These represent the first *Menacanthus* described from the Artamidae.

In a study of the mallophagan genus *Menacanthus* Neumann from passerine hosts, I obtained 2 series of specimens from wood-swallows (Passeriformes: Artamidae: *Artamus* Vieillot), a host group from which no *Menacanthus* have previously been described. Since these lice are distinctively different from any others I have seen, it is my purpose here to describe and illustrate these new species.

In the following descriptions, morphological terminology and numbers for head setae are much as given by Clay (1969). Measurements are in millimeters. The host nomenclature follows that of Peters (1962).

Menacanthus nelsoni Price, new species
fig. 1-6

Male (fig. 1): Head with preocular slit; nodi moderately developed, associated carinae weak. Alveoli of marginal temple setae 26 and 27 closely associated, with 26 finer and shorter than 27; long occipital setae 21, 22, and 23, with alveoli in straight line; long to very long marginal temple setae 24, 27, 29, and 31; preocular setae 10 and 11 long, 9 very long, with adjacent seta 8 much shorter and finer; dorsal seta 16 mediad to setae 14 and 15 and sensillum *c*; no evidence of dorsal sensillum *d*; inner middorsal seta 17 somewhat longer than and mediad to minute outer middorsal seta 18. Antenna with slightly expanded pedicel, and undivided terminal segment, mostly concealed beneath head. Hypopharyngeal sclerites weakly developed (HS: fig. 5). With ventral spinous process (VSP: fig. 5) 0.07-0.09 long on each side arising near base of maxillary palpus. Postmental setae each side with long and short fine seta and pair of short heavier setae (PMS: fig. 5); gula with 4 or 5 setae each side in elongate transparent area (fig. 5); row of mostly fine subocular setae, as in fig. 2. Outer central pronotal seta somewhat heavier and longer than inner seta; prosternal plate well developed but without setae other than usual 1 + 1 anterior to it (fig. 6); pronotal margin with 12 long, 4 short setae. With normal vertically oblong postnotum. Mesothorax not as sclerotized ring; 4 medioanterior mesonotal setae, alveoli of each pair close together each side; mesosternal plate triangular, with

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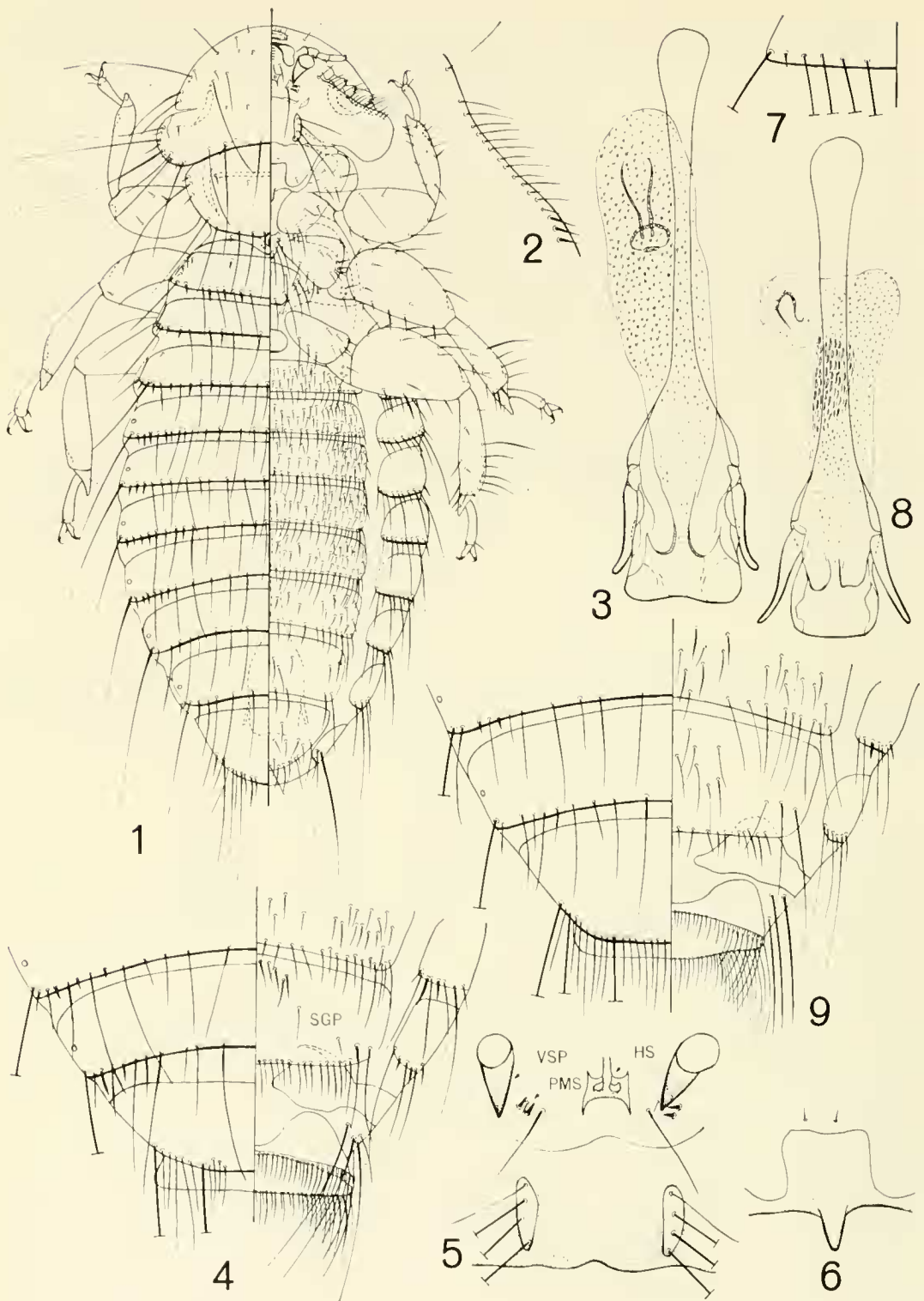


Fig. 1-6. *Menacanthus nelsoni*. 1, male. 2, subocular setae. 3, male genitalia. 4, female terminalia. 5, ventral head. 6, prosternal plate. Fig. 7-9. *M. elbeli*. 7, metanotal margin. 8, male genitalia. 9, female terminalia.

7-8 setae. Metanotum medioanteriorly with 2 short setae, marginally with 10 long, 4-10 short setae; metasternal plate with 10-12 setae. Abdominal tergites I and II with short seta lateral to postspiracular seta; postspiracular setae very long on II-VIII, slightly shorter on I; tergites I-VIII of equal lengths, undivided, and without anterior setae. Tergal setae with short among long: I, 16-18; II-IV, 24-33; V-VI, 18-27; VII, 15-18; VIII, 13-14. Last tergite marginally with 7-8 long, 9-14 short setae. Pleurites without prolonged ventroposterior corners or internal thickenings, and with only marginal setae. Weakly developed lateral brushes on sternites III-VI. Sternal setae: I, 0; II, 50-62; III, 85-90; IV-V, 95-110; VI, 75-85; VII, 44-47; VIII, 15-21. Sternites VIII and IX not fused, subgenital plate with 27-30 setae. Genitalia (fig. 3) 0.57-0.68 long, 0.13-0.15 wide, with relatively short parameres and large spiculate sac with small associated sclerites as shown.

Female: Head, thorax, and abdominal pleurites as for male. With more abdominal tergal setae: I, 21-25; II-III, 26-34; IV-V, 31-36; VI-VII, 25-35; VIII, 21-22. Last tergite marginally with 28-31 setae, with row interrupted medially (fig. 4). With more sternal setae: II, 58-75; III, 92-110; IV-V, 105-135; VI, 100-115; VII, 57-74. Subgenital plate (SGP: fig. 4) with flattened smooth medioposterior margin, and with 21-30 marginal and 17-21 anterior setae, with most of latter concentrated medioanteriorly. Anus essentially oval, without inner setae, and with 45-48 ventral, 52-58 dorsal fringe setae.

Dimensions: Preocular width, male 0.48-0.50, female 0.51-0.53; temple width, male 0.59-0.62, female 0.65-0.66; head length, male 0.30-0.32, female 0.32-0.34; prothorax width, male 0.42-0.45, female 0.48-0.49; metathorax width, male 0.52-0.60, female 0.62-0.64; total length, male 1.80-1.99, female 2.20-2.24.

Type-host: *Artamus cyanopterus* (Latham).

Type-material (all from type-host): Holotype δ , Exeter, Tasmania, 9 Apr. 1964, R. H. Green; in the collection of the Queen Victoria Museum, Tasmania. Paratypes: 1 δ , 3 ♀ , same data as holotype; 6 δ , 5 ♀ , Dunedo, New South Wales, 4 June 1968, R. Harris.

Discussion: This species represents the first *Menacanthus* to be described from the Artamidae. It is separable from other members of this genus by the gular pigmentation, the type of postmental setae, the unique subocular setae, the absence of setae on sternite I, the very large numbers of setae on other sternites, and the details of the terminalia and the male genitalia. This species is named for Dr. Bernard C. Nelson, who furnished me with the Dunedo series and who has otherwise contributed to Mallophaga taxonomy and biology.

Menacanthus elbeli Price, new species

fig. 7-9

Male: Close to *M. nelsoni*, differing as follows. Mesosternal plate with 7-12 setae; metanotum with 12 marginal setae, including only 2 short ones (fig. 7). Abdominal tergal setae: I, 15; II-VI, 19-25; VII, 17-19; VIII, 14-16. Sternal setae: II, 34-38; III, 67-89; IV-V, 73-90; VI, 60-68; VII, 27-34; VIII, 15-18. Subgenital plate with 20-28 setae. Genitalia (fig. 8) 0.55-0.61 long, 0.11-0.13 wide, with area of elongate spicules on central portion of sac and with small sac sclerite.

Female: Likewise much as for *M. nelsoni*, with head and thorax as for male of *M. elbeli*. Abdominal tergal setae: I, 16–17; II–VII, 22–29; VIII, 18–22. Last tergite with 35–40 marginal setae, with row not interrupted medially (fig. 9). Sternal setae: II, 38–45; III, 72–110; IV–V, 92–125; VI, 88–95; VII, 47–56. Subgenital plate (fig. 9) with 18–22 marginal and 18–27 anterior setae, with most of latter distributed as shown. Anus with 46–52 ventral and dorsal fringe setae.

Dimensions: Preocular width, male 0.52–0.55, female 0.54–0.59; temple width, male 0.60–0.67, female 0.66–0.71; head length, male 0.29–0.34, female 0.30–0.33; prothorax width, male 0.43–0.48, female 0.50–0.52; metathorax width, male 0.54–0.56, female 0.65–0.67; total length, male 1.76–2.06, female 2.18–2.36.

Type-host: *Artamus fuscus* Vieillot.

Type-material (all from type-host): Holotype ♂, Chiangmai Sansai, Ban San Luang, Thailand, 14 June 1962, K. Thonglongya, SEATO 1092; in the collection of the U.S. National Museum. Paratypes: 1 ♀, same data as holotype; 4 ♂, 4 ♀, Khorat, Sikiu, Pakchong, Thailand, 8 Feb. 1953, R. E. Elbel, RE-1118 and 1119, RT-B-17005; 1 ♀, Chaiyaphum, Dhu Khieo, Ban Kaeng, Ban Lat, Thailand, 19 Dec. 1952, R. E. Elbel, RE-933, RT-B-17551; 1 ♂, Lop Burl, Khao Oerawan Mt., Thailand, 10 July 1953, R. E. Elbel, RE-2770, B-21651.

Other material: 1 ♂, *A. maximus* Meyer, New Guinea.

Discussion: This species is close to *M. nelsoni*, differing from the other *Menacanthus* in the same features. It is separable from *M. nelsoni* by both sexes having only 2 short marginal metanotal setae, generally fewer abdominal tergal setae, and larger head width; the female by having a continuous row of a larger number of setae across the posterior margin of the last tergite, larger thorax dimensions, and anterior setae on the subgenital plate longer and distributed over a wider area; and the male by having fewer setae on most abdominal sternites, and the genitalia somewhat smaller, the genital sac with different spiculation and associated sclerite. This species is named for Dr. Robert E. Elbel in recognition of his role in obtaining the above material and of his numerous contributions to the taxonomy of Mallophaga.

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